

WHAT IS CLAIMED IS:

1. A system for cleaning evaporator cores of an air handling system comprising:

- a) an intake manifold;
- b) flow control devices;
- c) at least one container for treating agents;
- e) an outlet manifold which connects to a connector;
- f) a connector attached to fluid distributors which clean the evaporator core with water or solutions of water and treating agents.

2. The system according to claim 1 wherein the flow control device is selected from the group consisting of check valves, electrical flow control devices, mechanical flow control devices, hydraulic flow control devices, and combinations thereof.

3. The method according to claim 1 wherein the treating agents are selected from the group consisting of biocides, microbicides, microbiostats, disinfectants, rinse aids, cleaning agents, deodorants, and mixtures thereof.

4. The system according to claim 1 wherein the outlet manifold is selected from the group consisting of

injection spray nozzles and low-pressure, waterfall-effect manifolds.

5. The system according to claim 1 wherein the pressure of water coming into the intake manifold is maintained at a predetermined pressure.

6. The system according to claim 5 wherein the pressure of water coming into the intake manifold is maintained at approximately 30 psi.

7. The system according to claim 1 wherein two of the check valves or other flow control devices are connected to one of the group consisting of venturi, pump valves, mixing valves, gravity valves, long radius nozzles, thin plate orifices, and flow restriction devices, in order to drop the water pressure to a lower pressure.

8. The system according to claim 7 wherein the water pressure is adjusted to about 15 psi.

9. The system according to claim 1 wherein the system is controlled automatically.

10. The system according to claim 1 wherein the system is controlled manually.

11. The system according to claim 1 wherein the at least one container for treating agents has a visual indicator of contents contained therein.

12. The system according to claim 1 wherein the outlet manifold and the connector are connected to the air handling unit and the remaining components are portable.

13. The system according to claim 1 further including a wiper associated with the distribution manifold that controls the flow of water and prevents drips and migration of water to other portions of the system.

14. The system according to claim 1 comprising three flow control devices.

15. A method for cleaning the evaporator core in an air handling system comprising:

- a) introducing water into an intake port;
- b) regulating the pressure of the water to a constant, predetermined value;

c) feeding the pressurized water through an intake manifold having at least one outlet to be distributed through at least one flow control device, at least one control device being are equipped with a device to reduce the water pressure and to draw in treating agents;

d) distributing the water and treating agents through an outlet manifold, through a connector, and to spray nozzles directed at the evaporator core whereby the water and treating agents clean, rinse, or disinfect the evaporator core.

16. The method according to claim 15 wherein the flow control device is selected from the group consisting of check valves, electrical flow control devices, mechanical flow control devices, hydraulic flow control devices, and combinations thereof.

17. The method according to claim 15 wherein the treating agents are selected from the group consisting of biocides, microbicides, cleaning agents, deodorants, and mixtures thereof.

18. The method according to claim 15 wherein the outlet manifold is selected from the group consisting of

injection spray nozzles and low-pressure, waterfall-effect manifolds.

19. The method according to claim 15 wherein the system is controlled automatically.

20. The method according to claim 15 wherein the system is controlled manually.

21. The method according to claim 14 wherein the control, water supply, and mixing unit are portable and are adapted to be connected to a distribution manifold on an air handler.

22. The method according to claim 19 wherein the system is controlled so that operation of the system beings after a predetermined number of on-off cycles of the air handling system.

23. The method according to claim 12 wherein the intake manifold has three outlets and there are three flow control devices.